



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/531,740

04/18/2005

Byung Sung Lee

466/1

2330

51439

7590

12/08/2008

SEAN LIAM KELLEHER

Kelleher IP PLLC

16 PECKSLIP RD

CARMEL, NY 10512

EXAMINER

HENNING, MATTHEW T

ART UNIT

PAPER NUMBER

2431

NOTIFICATION DATE

DELIVERY MODE

12/08/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

skelleher@kelleherip.com

Office Action Summary	Application No. 10/531,740	Applicant(s) LEE, BYUNG SUNG	
	Examiner MATTHEW T. HENNING	Art Unit 2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/18/2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1 This action is in response to the communication filed on 4/18/2005.

2 **DETAILED ACTION**

3 Claims 1-17 have been examined.

4 *Title*

5 The title of the invention is acceptable.

6 ***Information Disclosure Statement***

7 The information disclosure statement(s) (IDS) submitted on 11/10/2006 is in compliance
8 with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information
9 disclosure statements.

10 ***Drawings***

11 Figures 1, 2a and 2b should be designated by a legend such as --Prior Art-- because only
12 that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with
13 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the
14 application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header
15 (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes
16 are not accepted by the examiner, the applicant will be notified and informed of any required
17 corrective action in the next Office action. The objection to the drawings will not be held in
18 abeyance.

19 ***Specification***

20 The disclosure is objected to because of the following informalities:

21 The specification is objected to under 37 CFR 1.77(c) because the section headings
22 should not be underlined. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Jensen et al. (US Patent Number 5,450,490) hereinafter referred to as Jensen.

Regarding claim 1, Jensen disclosed a method for encrypting a speech signal transmitted through a communication line (Jensen Abstract), comprising: a characteristic parameter extracting step of splitting the speech signal into predetermined frequency components and extracting a magnitude value of each of the frequency components (Jensen Col. 9 Lines 23-32); and a data transmission step of transmitting the parameter data extracted at the characteristic parameter extracting step through the communication line (Jensen Col. 15 Lines 46-60).

Regarding claim 2, Jensen disclosed a method for encrypting a speech signal transmitted through a communication line, comprising: an analog/digital conversion step of converting an analog speech signal into digital data (Jensen Col. 9 Lines 23-26); a characteristic parameter extracting step of extracting a magnitude value of each of frequency components of the data (Jensen Col. 9 Lines 26-32); and a digital/analog conversion step of converting the data extracted at the characteristic parameter extracting step into an analog signal (Jensen Col. 10 Lines 15-18).

Regarding claim 10, Jensen disclosed a system for encrypting a speech signal transmitted through a communication line, comprising: an analog/digital conversion means for converting an

1 analog speech signal into digital data (Jensen Col. 9 Lines 23-26); a characteristic parameter
2 extracting means for extracting a magnitude value of each of frequency components of the data
3 (Jensen Col. 9 Lines 26-32); and a digital/analog conversion means for converting the data
4 obtained by the characteristic parameter extracting means into an analog signal (Jensen Col. 10
5 Lines 15-18).

6 Regarding claims 3 and 11, Jensen disclosed that the characteristic parameter extracting
7 step includes an FFT processing step (Jensen Col. 9 Lines 26-32).

8 Regarding claims 4 and 12, Jensen disclosed that the characteristic parameter extracting
9 step includes DCT processing step (Jensen Col. 13 Lines 17-22).

10 Regarding claims 5 and 13, Jensen disclosed that the characteristic parameter extracting
11 step includes WAVELET transform processing step (Jensen Col. 9 Lines 26-32).

12 Regarding claims 6 and 14, Jensen disclosed that the characteristic parameter extracting
13 step includes a subband dividing step (Jensen Col. 9 Lines 17-32).

14 Regarding claims 7 and 15, Jensen disclosed a rearrangement step of rearranging a series
15 of characteristic parameters obtained at the characteristic parameter extracting step (Jensen Col.
16 9 Line 54 – Col. 10 Line 14).

17 Regarding claims 8 and 16, Jensen disclosed that rearrangement of the characteristic
18 parameters change magnitude values of the characteristic parameters (Jensen Col. 9 Line 54 –
19 Col. 10 Line 14).

20 Regarding claims 9 and 17, Jensen disclosed that the rearrangement step rearranges the
21 characteristic parameters time-serially (Jensen Col. 3 Line 50 – Col. 4 Line 2).

22

Conclusion

Claims 1-17 have been rejected.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW T. HENNING whose telephone number is (571)272-3790. The examiner can normally be reached on M-F 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew T Henning/
Examiner, Art Unit 2431